

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A process for producing crystalline 1,2-polybutadiene, ~~which is characterized in that~~ comprising polymerizing 1,3-butadiene is ~~polymerized~~ in a hydrocarbon solvent ~~using~~ with a catalyst system comprising (A) a cobalt salt, (B1) a phosphine compound having one branched aliphatic group of 3 or more carbon atoms or one alicyclic group of 5 or more carbon atoms and two aromatic groups, and (C) an organic aluminum compound.

Claim 2 (Original): The process for producing crystalline 1,2-polybutadiene according to claim 1, wherein the catalyst system comprises a phosphine complex of a cobalt salt obtained by mixing component (A) and component (B1) , and component (C).

Claim 3 (Currently Amended): The process for producing crystalline 1,2-polybutadiene according to claim 1 ~~or 2~~, wherein component (A) is at least one selected from the group consisting of cobalt chloride, cobalt bromide, cobalt octylate, cobalt versatate and cobalt naphthenate.

Claim 4 (Currently Amended): The process for producing crystalline 1,2-polybutadiene according to claim 1 ~~or 2~~, wherein component (B1) is diphenylcyclohexylphosphine.

Claim 5 (Currently Amended): The process for producing crystalline 1, 2-polybutadiene according to ~~any one of claims 1 to 4~~, claim 1, wherein the use ratio of component (B1) to mol of component (A) is from 1 to 5 mol.

Claim 6 (Currently Amended): The process for producing crystalline 1,2-polybutadiene according to ~~any one of claims 1 to 5~~, Claim 1, wherein the amount of component (C) ~~used~~ is within the range of 500 to 4,000 by the molar ratio of 1,3-butadiene and the aluminum atom in component (C) (1,3-butadiene/A1).

Claim 7 (Currently Amended): The process for producing crystalline 1,2-polybutadiene according to ~~any one of claims 1 to 7~~, Claim 1, wherein the hydrocarbon solvent is selected from the group consisting of cyclohexane and/or, methylene chloride and mixtures thereof.

Claim 8 (Currently Amended): The process for producing crystalline 1, 2-polybutadiene according to ~~any one of claims 1 to 7~~ Claim 1, wherein the polymerization temperature is from -20°C to +120°C.

Claim 9 (Currently Amended): The process for producing crystalline 1, 2-polybutadiene according to ~~any one of claims 1 to 8~~ Claim 1, wherein the crystallinity of the resulting 1,2-polybutadiene is from 5 to 40%.

Claims 10-18 (Canceled).